

Please add the following new Claims 22-32:

AI 22. (New) A method for scheduling instructions comprising:

reordering a sequence of instructions without concern for a dependency that will result in violation of any scheduling constraints provided that there is no known said dependency;

raising an exception if the reordered sequence of instructions violates any said scheduling constraints; and

determining steps to be taken for correctly executing said sequence of instructions about which said exception is raised.

23. (New) The method of Claim 22, further comprising:

handling said sequence of instructions sequentially, if said sequence of instructions has said dependency that will result in violation of any said scheduling constraints

24. (New) A method for scheduling instructions comprising:

placing a sequence of instructions into one of a plurality of categories based on probability of dependencies; and

reordering said sequence of instructions based on which of said plurality of categories said sequence of instructions is placed.

25. (New) The method of Claim 24, wherein:

if said sequence of instructions is placed into a category of said plurality of categories in which there are no dependencies, said reordering said sequence of

instructions comprises reordering without regard to violating a scheduling constraint.

26. (New) The method of Claim 24, wherein:

if said sequence of instructions is placed into a category of said plurality of categories in which there are probably no dependencies, said reordering said sequence of instructions comprises reordering without regard to violating a scheduling constraint.

27. (New) The method of Claim 24, wherein:

if said sequence of instructions is placed into a category of said plurality of categories in which there are probably dependencies, said reordering said sequence of instructions comprises reordering without regard to violating a scheduling constraint.

28. (New) The method of Claim 24, wherein:

if said sequence of instructions is placed into a category of said plurality of categories in which there are probably dependencies, said reordering said sequence of instructions comprises keeping the original order.

29. (New) The method of Claim 24, wherein:

if said sequence of instructions is placed into a category of said plurality of categories in which there are known dependencies, said reordering said sequence of instructions comprises keeping the original order.



30. (New) A method as claimed in Claim 1, wherein the reordering said sequence of instructions comprises:

placing said sequence of instructions into one of a plurality of categories based on probability of dependencies.

31. (New) A method as claimed in Claim 30, wherein the reordering said sequence of instructions further comprises:

reordering said sequence of instructions based on which of said plurality of categories said sequence of instructions is placed.

32. (New) The method of Claim 30, wherein:

if said sequence of instructions is placed into a category of said plurality of categories in which there are probably no dependencies, the reordering said sequence of instructions further comprises reordering without regard to violating a scheduling constraint.